

Amendments to the Claims :

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-20. (Cancelled)

21. (Currently Amended) ~~A transport basket fastening device for securing a at least one fuel assembly in a housing of a transport basket, the assembly having a polygonal section and comprising an upper end piece and a lower end piece, the basket and the housing having a polygonal section comprising a first open end and a second end, the fastening device comprising:~~
a head plate;
at least one tubular wall having an open end fixed on said head plate, the at least one tubular wall delimiting a housing able to contain a single fuel assembly, the housing having a polygonal section with a shape identical to the shape of the fuel assembly;
a fastening device for securing the fuel assembly in the housing,
wherein a connecting device integral with the fastening device is formed of a single connecting device and configured to make a rigid connection between the upper end piece of the fuel assembly and the open end of the at least one tubular wall of the basket housing in a predetermined relative position such that the upper end piece of the fuel assembly bears directly in contact with two adjacent faces of the housing and such that on at least part of its length, the connecting device being placed above the upper end piece of the fuel assembly and configured to is suspended by its the fuel assembly at the upper end piece when the housing is oriented substantially vertically, the connecting device being fully located above the upper end piece of the assembly. , a part of the housing located proximal to the second end of the housing and having a smaller cross-section compared to the first end, wherein the second end has dimensions approximately equal to dimensions of the lower end piece of the fuel assembly.

22-25. (Cancelled)

26. (Currently Amended) A ~~device~~transport basket according to claim 21, in which the connecting device is configured to be fixed on the upper end piece of the assembly by first clamping means and to be fixed in the open end of the ~~housing~~tubular wall by second clamping means.

27. (Currently Amended) A ~~device~~transport basket according to claim 26, in which the connecting device includes transverse displacement means configured to move the upper end piece of the assembly in a direction transverse with respect to the housing towards the two adjacent faces of the housing and away from them.

28. (Currently Amended) A ~~device~~transport basket according to claim 27, in which the connecting device includes axial displacement means configured to move the assembly in a direction axial with respect to the housing, away from the second end of the housing and towards the second end.

29. (Withdrawn) A device according to claim 28, in which the first clamping means, the second clamping means, the means for transverse displacement, and the means for axial displacement are activated by separate control devices configured to be maneuvered separately.

30. (Withdrawn) A device according to claim 29, in which

the connecting device has a longitudinal axis configured to be oriented parallel to the longitudinal axis of the fuel assembly, and the first clamping means comprises

jaws configured to move onto a first part of the connecting device along directions approximately radial with respect to the axis,

the second clamping means comprises

a bayonet ring configured to rotate about a second part of the connecting device about the axis,

the means for axial displacement comprises

means for controlling a relative displacement between the first part and the second part along the axis and

the means for transverse displacement comprises

at least one sliding block configured to move onto the first part of the connecting device along a direction approximately radial with respect to the axis, the sliding block also forming part of the second clamping means.

31. (Withdrawn) A device according to claim 28, in which the first clamping means, the second clamping means, and the means for axial displacement are activated by a single control device.

32. (Withdrawn) A device according to claim 31, in which the single control device is a screw, anchored free to rotate on the connecting device, the screw acting on thrust rods forming the first clamping means and the means for axial displacement, and acting on jaws forming the second clamping means, through control rods articulated on the connecting device, on a nut

engaged on the screw, on the thrust rods and the jaws, and the means for transverse displacement comprises thrust pads anchored on the connecting device.

33. (Currently Amended) A ~~device~~transport basket according to claim 28, in which the first clamping means, the transverse displacement means, and the axial displacement means are activated by a single control device and the second clamping means comprises a separate attachment device.

34. (Currently Amended) A ~~device~~transport basket according to claim 33, in which the single control device is a screw, anchored free to rotate on the connecting device, the screw acting on claws forming the first clamping means, the means for axial displacement, and the means for transverse displacement, through a nut engaged on the screw and on which the claws are articulated.

35-40. (Cancelled)

41. (Currently Amended) A ~~connecting device~~transport basket for at least one adapted for use with a transport housing capable of containing a fuel assembly therein, the basket comprising a head plate, at least one tubular wall having an open end fixed on the head plate, each tubular wall configured to receive the at least one fuel assembly, and a fastening device for only securing the fuel assembly to the open end of the tubular wall, -wherein the fastening device comprising includes:

a body fixed to the head plate above the open end of the tubular wall;

~~a clamping member configured to mount the device to a head plate of the transport housing;~~

a control device carried by the body within the open end of the tubular wall and configured to freely rotate along a longitudinal axis of the tubular wall, wherein at least a portion of the control device vertically moves along the longitudinal axis upon being rotated in a first direction;

a claw mechanism operably coupled to the control device within the open end of the tubular wall, wherein the claw mechanism is configured to pivot between a retracted position and an extended position in response to rotation of the control device, wherein the claw mechanism is engageable to an upper end piece of the fuel assembly transport housing and moves along with the control device in the longitudinal axis in response to the control device being rotated in the first direction.

42. (Currently Amended) A ~~device~~transport basket according to claim 41 further comprising: a pin guide coupled to the body, the pin guide having a stop surface configured to come into contact with the upper end piece of the fuel assembly within the transport basket. ~~an upper end piece within the transport housing when the device is securely engaged with the transport housing.~~

43. (Currently Amended) A ~~device~~transport basket according to claim 42, wherein the claw mechanism is configured to upwardly move the upper end piece along the longitudinal axis until the upper end piece is securely in contact with the stop surface of the pin guide in response to the control device being further rotated in the first direction.

44. (Currently Amended) A ~~device~~transport basket according to claim 41, further comprising a nut coupled to the control device and the claw mechanism, the nut being operable to move along the longitudinal axis in response to rotation of the control device, wherein rotation of the control device in ~~[[a]]~~ the first ~~rotational~~ direction causes the nut to move upward along the longitudinal axis and cause the claw mechanism to pivot outward away from the longitudinal axis.

45-46. (Cancelled)

47. (New) A transport basket for at least one fuel assembly having a polygonal section and comprising an upper end piece and a lower end piece, the basket comprising:

- a head plate;

- at least one tubular wall having an open end fixed on said head plate, the at least one tubular wall delimiting a housing able to contain a single fuel assembly, the housing having a polygonal section with a shape identical to the shape of the fuel assembly, and

- a fastening device for securing each fuel assembly in its housing,

- wherein each fastening device comprises only one connecting device capable of making a rigid connection only between the upper end piece of the fuel assembly and the head plate of the transport basket in a predetermined relative position such that the upper end piece of the fuel assembly bears directly in contact with two adjacent faces of the housing and such that the fuel assembly is suspended by its upper end piece when the housing is oriented substantially vertically, the connecting device being fully located above the upper end piece of the assembly and being capable of being fixed on the upper end piece of the fuel assembly by first clamping means including transverse displacement means capable of moving the upper end piece of the

fuel assembly in a direction transverse with respect to the housing, towards the two adjacent faces of the housing and away from them, and axial displacement means, capable of moving the fuel assembly in a direction axial with respect to the tubular wall, away from the second end of the housing and towards said housing.

48. (New) The transport basket of claim 21, wherein the fastening device is configured to only act on the head plate.

49. (New) The transport basket of claim 41, wherein the fastening device is formed of a single connecting device only acting on the head plate of the basket.

50. (New) The transport basket of claim 47, wherein the fastening device is formed of a single connecting device only acting on the head plate of the basket.